

WHAT IS CLAIMED IS:

1. A radio communication system comprising:  
a base station and a terminal station provided as one and another communication stations,  
5 wherein the one communication station is constructed to send each of a plurality of send packets to the another communication station in parallel through a plurality of channels as one packet unit.
- 10 2. The radio communication system as in claim 1,  
wherein the one communication station is constructed to send, after accumulation of  $n$  send packets has been completed, each of  $n$  send packets through  $n$  channels to the another communication station as one packet unit, the  $n$  being a natural  
15 number equal to or more than 2.
3. The radio communication system as in claim 2,  
wherein the one communication station is constructed to send, after a predetermined period of time has elapsed before  
20 the accumulation of  $n$  send packets is completed, each of  $m$  send packets, accumulation of which has been completed in the predetermined period, through  $m$  channels to the another communication station as one packet unit, the  $m$  being a natural  
number and smaller than  $n$ .
- 25 4. The radio communication system as in claim 1,  
wherein the another communication station is constructed

to send an ACK packet to the one communication station as independent data through the plurality of channels with respect to each of a plurality of send packets received from the one communication station, after the send packet is normally received  
5 from the one communication station, the ACK packet indicating that each of the send packet has been normally received.

5. The radio communication system as in claim 4,  
wherein the one communication station is constructed  
10 resend the send packet, which has not been normally received by the another communication station, to the another communication station after a predetermined period of time has elapsed before the ACK packet is received from the another communication station.

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6. The radio communication system as in claim 1,  
wherein the another communication station is constructed to send an ACK packet to the one communication station as independent data through the plurality of channels with respect  
20 to each of the plurality of send packets received from the one communication station, after the send packet has been normally received from the one communication station, the ACK packet indicating that the send packet has been normally received, and

wherein the another communication station is constructed  
25 to send a NACK packet to the one communication station as independent data through the plurality of channels after the send packet has not been normally received from the one

communication station, the NACK packet indicating that the send packet has not been normally received.

7. The radio communication system as in claim 6,

5 wherein the one communication station is constructed to resend the send packet, which has not been normally received by the another communication station, to the another communication station, after the NACK packet has been received from the another communication station.

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8. A communication station for operating as a base station or a terminal station,

15 wherein the communication station is constructed to send each of a plurality of send packets in parallel through a plurality of channels to an another communication station as one packet unit.

9. A communication station for operating as a base station or a terminal station,

20 wherein the communication station is constructed to receive a plurality of send packets from another communication station, and

25 wherein the communication station is constructed to send an ACK packet to the another communication station as independent data through the plurality of channels with respect to each of the plurality of send packets received from the another communication station, after the send packet has been normally

received from the another communication station, the ACK packet indicating that the send packet has been normally received.

10. The communication station as in claim 9,

5 wherein the communication station sends a NACK packet to another communication station as independent data through the plurality of channels after the send packet has not been normally received from the another communication station, the NACK packet indicating that the send packet has not been normally received.

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11. A radio communication system comprising:

a base station and a terminal station provided as one and another communication stations,

15 wherein the one communication station is constructed to send each of a plurality of beacons in parallel through the plurality of channels to the another communication station as independent data through the plurality of channels, each of the beacons corresponding to each of the plurality of channels,

20 the another communication station is constructed to send each of a plurality of registration packets and a plurality of authentication packets in parallel through the plurality of channels to the one communication station as independent data through after each of the plurality of beacons has been received from the one communication station, and

25 the one communication station is constructed to send each of a plurality of packets indicating whether a registration is correct or not and each of a plurality of packets indicating

whether an authentication is correct or not in parallel through the plurality of channels to the another communication station as independent data, each of such packets corresponding to each of the plurality of channels, after each of the plurality of registration packets and the plurality of authentication packets is received from the another communication station.

12. The radio communication system as in claim 11,  
wherein the one communication station is constructed to send the plurality of beacons to the another communication station synchronously,

wherein the another communication station is constructed to send the plurality of registration packets and the plurality of authentication packets to the one communication station synchronously, and

wherein the one communication station is constructed to send to the another communication station synchronously the plurality of packets indicating whether the registration is correct or not and the plurality of packets indicating whether the authentication is correct or not.

13. A communication station for operating as a base station or a terminal station,

wherein the communication station is constructed to send each of a plurality of beacons, which corresponds to each of a plurality of channels, in parallel through the plurality of channels to another communication station as independent data,

and

wherein the communication station is constructed to send each of a plurality of packets indicating whether a registration is correct or not and a plurality of packets indicating whether an authentication is correct or not, each of such packets corresponding to each of the plurality of channels, in parallel through the plurality of channels to the another communication station as independent data after each of the plurality of registration packets and the plurality of authentication packets is received from the another communication station.

14. A communication station for operating as a base station or a terminal station,

wherein the communication station is constructed to send each of a plurality of registration packets and a plurality of authentication packets, which corresponds to each of a plurality of channels, in parallel through the plurality of channels to the another communication station as independent data after each of the plurality of beacons is received from the another communication station.

15. A radio communication system comprising:

a base station and a terminal station provided as one and another communication stations,

wherein the one communication station is constructed to send each of a plurality of beacons, which corresponds to each of a plurality of channels, in parallel through the plurality

of channels to the another communication station as common data through the plurality of channels,

5 wherein the another communication station is constructed to send each of a plurality of registration packets and a plurality of authentication packets, which corresponds to each of a plurality of channels, in parallel through the plurality of channels to the one communication station as the common data through the plurality of channels after each of the plurality of beacons has been received from the one communication station,  
10 and

wherein the one communication station is constructed to send each of a plurality of packets indicating whether a registration is correct or not and a plurality of packets indicating whether an authentication is correct or not, each  
15 of such packets corresponding to each of the plurality of channels, in parallel through the plurality of channels to the another communication station as independent data through the plurality of channels after each of the plurality of registration packets and the plurality of authentication packets is received from  
20 the another communication station.

16. The radio communication system as in claim 15,

wherein the one communication station is constructed to send a plurality of beacons to the another communication station  
25 synchronously,

wherein the another communication station is constructed to send a plurality of registration packets and a plurality of

authentication packets to the one communication station synchronously, and

wherein the one communication station is constructed to send the plurality of packets indicating whether the registration is correct or not and the plurality of packets indicating whether the authentication is correct or not to the another communication station synchronously.

17. The radio communication system as in claim 15,

wherein the one communication station is constructed to store in each of the plurality of beacons a communication station identifier of the one communication station individually designated every communication station, and send each of the plurality of beacons, in which the communication station identifiers of the one communication station is stored, to the another communication station, and

wherein the another communication station is constructed to recognize that the communication station identifier of the one communication station stored in each of a plurality of beacons received from the one communication station is common to the plurality of channels, and sends each of the plurality of registration packets and the plurality of authentication packets to the one communication station.

18. The radio communication system as in claim 15,

wherein the another communication station is constructed to store in each of the plurality of registration packets and



the plurality of authentication packets the another communication station identifier individually designated every communication station, and sends each of the plurality of registration packets and the plurality of authentication packets, in which the another communication station identifiers are stored, to the one communication station, and

wherein the one communication station is constructed to recognize that another communication station identifier stored in each of a plurality of registration packets and a plurality of authentication packets received from the another communication is common to the plurality of channels, and send each of the plurality of packets indicating whether the registration is correct or not, and the plurality of packets, of which the authentication is correct or not, to the another communication station.

19. A communication station for operating as a base station or a terminal station,

wherein the communication station is constructed to send each of a plurality of beacons, which corresponds to each of a plurality of channels, in parallel through the plurality of channels to another communication station as common data, and

wherein the communication station is constructed to send each of a plurality of packets indicating whether a registration is correct or not and a plurality of packets indicating whether an authentication is correct or not, each of such packets corresponding to each of the plurality of channels, in parallel

through the plurality of channels to the another communication station as independent data after each of the plurality of registration packets and the plurality of authentication packets is received from the another communication station.

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20. The communication station as in claim 19,

wherein a communication station identifier of the communication station individually designated every communication station is stored in each of the plurality of beacons, and

wherein each of the plurality of beacons, in which the communication station identifiers of the one communication station are stored, is sent to the another communication station.

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21. The communication station as in claim 19,

wherein an identifier of the another communication station stored in each of a plurality of registration packets and a plurality of authentication packets, which are received from the another communication station, is recognized as being common among the plurality of channels, and

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wherein each of the plurality of packets indicating whether the registration is correct or not and the plurality of packets indicating whether the authentication is correct or not is sent to the another communication station.

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22. A communication station for operating as a base station or a terminal station,

wherein the communication station is constructed to send each of a plurality of registration packets and a plurality of authentication packets, which correspond to each of a plurality of channels, in parallel through the plurality of channels to the another communication station as common data through the plurality of channels after each of a plurality of beacons is received from the another communication station.

23. The communication station as in claim 22,

wherein a communication station identifier of the communication station individually designated every communication station is stored in each of the plurality of registration packets and the plurality of authentication packets, and each of the plurality of registration packets and the plurality of authentication packets, in which the communication station identifiers of the communication stations are stored, is sent to the another communication station.

24. The communication station as in claim 22,

wherein the communication station identifier of the another communication station stored in each of a plurality of beacons, which are received from the another communication station, is recognized as being common among the plurality of channels, and

wherein each of the plurality of registration packets and the plurality of authentication packets is sent to the another communication station.

25. A radio communication system comprising:

a base station and a terminal station provided as one and another communication stations,

5 wherein the one communication station is constructed to send a single beacon, which representatively corresponds to each of a plurality of channels, through a single exclusive channel to the another communication station, and

10 wherein the another communication station is constructed to send a single registration packet and a single authentication packet, which representatively correspond to each of the plurality of channels, through the single exclusive channel to the one communication station after the single beacon has been received from the one communication station, and

15 wherein the one communication station is constructed to send a single packet indicating whether a registration is correct or not and a single packet indicating whether an authentication is correct or not, each of such packets representatively corresponding to each of the plurality of channels, through the  
20 single exclusive channel to the another communication station, after the single registration packet and the single authentication packet are received from the another communication station.

25 26. The radio communication system as in claim 25,

wherein the one communication station is constructed to store in the single beacon a communication station identifier

of the one communication station individually designated every communication station, and send the single beacon, in which the communication station identifier of the one communication station is stored, to the another communication station, and

5            wherein the another communication station is constructed to recognize that the communication station identifier of the one communication station stored in the single beacon received from the one communication station is common to the plurality of channels, and send the single registration packet and the  
10           single authentication packet to the one communication station.

27.    The radio communication system as in claim 25,

          wherein the another communication station is constructed to store in a single registration packet and a single  
15           authentication packet a communication station identifier of the another communication station individually designated every communication station, and send a single registration packet and a single authentication packet, in which the communication station identifier of the another communication station is stored,  
20           to the one communication station, and

          wherein the one communication station is constructed to recognize that the communication station identifier of the another communication station stored in the single registration packet and the single authentication packet is common to the  
25           plurality of channels, and send a single packet indicating whether a registration is correct or not and a single packet indicating whether an authentication is correct or not, to the

another communication station.

28. A communication station for operating as a base station or a terminal station,

5        wherein the communication station is constructed to send a single beacon, which representatively corresponds to each of a plurality of channels, through a single exclusive channel to the another communication station, and

       wherein the communication station is constructed to send  
10       a single packet indicating whether a registration is correct or not and a single packet indicating whether an authentication is correct or not, each of such packets representatively corresponding to each of the plurality of channels, through the single exclusive channel to the another communication station  
15       after a single registration packet and a single authentication packet are received from the another communication station.

29. The communication station as in claim 28,

       wherein a communication station identifier of the  
20       communication station individually designated every communication station is stored in the single beacon, and

       wherein the single beacon, in which the communication station identifier of the communication station is stored, is sent to the another communication station.  
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30. The communication station as in claim 28,

       wherein a communication station identifier of the another

communication station stored in a single registration packet and a single authentication packet, which are received from the another communication station, is recognized as being common among the plurality of channels, and

5        wherein a single packet indicating a registration is correct or not and a single packet indicating whether an authentication is correct or not are sent to the another communication station.

10       31. A communication station for operating as a base station or a terminal station,

         wherein the communication station is constructed to send a single registration packet and a single authentication packet, which representatively correspond to each of a plurality of  
15       channels, through a single exclusive channel to another communication station after a single beacons is received from the another communication station,.

32. The communication station as in claim 31,

20       wherein a communication station identifier of the communication station individually designated every communication station is stored in the single registration packet and the single authentication packet, and

         wherein the single registration packet and the single  
25       authentication packet, in which the communication station identifier of the communication station is stored, are sent to the another communication station.

33. The communication station as in claim 31,

wherein a communication station identifier of the another  
communication station stored in the single beacon, which is  
5 received from the another communication station, is recognized  
as being common among the plurality of channels, and

wherein the single registration packet and the single  
authentication packet are sent to the another communication  
station.